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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,213	07/17/2006	Yukitane Kimoto	HIP-06-1206	2677

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IP GROUP OF DLA PIPER LLP (US)
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EXAMINER

BLACK, MELISSA ANN

ART UNIT	PAPER NUMBER
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3612

NOTIFICATION DATE	DELIVERY MODE
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11/18/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

pto.phil@dlapiper.com

Office Action Summary

Application No.

10/586,213

Applicant(s)

KIMOTO ET AL.

Examiner

MELISSA A. BLACK

Art Unit

3612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1,4,15-17,19-24,26,31 and 32 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1,4,15-17,19-24,26,31 and 32 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. This office action is in response to Amendments and Remarks filed 8/25/11. Claims 1, 4, 15-17, 19-24, 26 and 31 and 32 are pending in the application and rejected as set forth below.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 4, 19-23, are rejected under 35 U.S.C. 102(e) as being anticipated by US Pat # 7,497,507 to Matsushima et al.

Re Claim 1, Matsushima et al discloses An FRP panel for an automobile comprising at least two FRP layers separated from each other with a first (2) of the FRP layers on a first surface side and a second of the FRP layers (3) on a second surface side on an opposite side of the first surface, wherein either of the first and second FRP layers is formed as a lower-strength FRP layer, and the lower-strength FRP layer forms a crushable structure that absorbs impacts to a pedestrian during a collision, wherein differences in strength are provided by one or two or .more differences selected from the group consisting of a difference in amount of reinforcing fibers, a difference in property of reinforcing fibers and a difference in orientation of reinforcing fibers, and wherein each of the, FRP layers is formed integrally as said panel portion is an FRP solid plate and said difference in strength is provided by Providing a high breaking elongation layer on the lower strength FRP layer (see column 3, lines1-50). Re Claim 4, Matsushima et al

Art Unit: 3612

discloses wherein a core material is disposed between the first and second FRP layers, Column 3, line 10-24). Re Claim 19-23 Matsushima et al disclose wherein said high breaking elongation layer comprises a high breaking elongation resin, and said high breaking elongation resin comprises a thermoplastic resin having a low affinity in adhesion with a matrix resin of said FRP layer, wherein said high breaking elongation layer comprises a thermoplastic resin film, wherein said high breaking elongation layer comprises a multi-layer laminated film, wherein said difference in strength is provided by providing a difference in thickness between said first and second FRP layers, wherein a difference in planar rigidity against external force is provided between said first and second' FRP layers by prodding a difference in hardness between a surface and a back surface of said core material.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 15-17, 24, 26, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsushima et al in view of US Pat # 7,150,496 to Fujimoto.

Matsushima et al fails to disclose a panel plane is sectioned in a lattice-like form into nearly rectangular areas by said concave/convex shape into nearly diamond-shaped areas by said concave/convex shape, and wherein said concave/convex shape is provided so as to depict a multiple closed curved line with a nearly concentric analog formation on a panel plane, wherein said concave/convex shape is provided along an outer circumferential shape of said FRP panel for an automobile, wherein said difference in strength is provided by introducing a plurality of discontinuous part of a reinforcing fiber substrate into at least one reinforcing fiber substrate

Art Unit: 3612

layer of any one of said first and second FRP layers, wherein the discontinuous part extends almost straightly.

Fujimoto teaches the use a panel plane is sectioned in a lattice-like form into nearly rectangular areas by said concave/convex shape into nearly diamond-shaped areas by said concave/convex shape, and wherein said concave/convex shape is provided so as to depict a multiple closed curved line with a nearly concentric analog formation on a panel plane, wherein said concave/convex shape is provided along an outer circumferential shape of said FRP panel for an automobile, wherein said difference in strength is provided by introducing a plurality of discontinuous part of a reinforcing fiber substrate into at least one reinforcing fiber substrate layer of any one of said first and second FRP layers, wherein the discontinuous part extends almost straightly (See Figures 1-10).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to change the shape of the panel plane as taught by Fujimoto on the device of JP 2002-264846A in order to change the energy absorption of the panel during impact, furthermore changing the shape and/or size of an object is considered to be a design choice.

Re Claims 24-28 and 32 JP 2002-264846 A discloses An FRP panel for an automobile comprising a panel portion having a first FRP layer on a first surface side and a second FRP layer on a second surface side on an opposite side of the first surface, wherein either of the first and second FRP layers is formed as a lower-strength FRP layer, and the lower-strength FRP layer forms a crushable structure that absorbs impacts to a pedestrian during a collision, wherein differences in strength are provided by one or two or more differences selected from the group consisting of a difference in amount of reinforcing fibers, a difference in property of reinforcing

Art Unit: 3612

fibers and a difference in orientation of reinforcing fibers, wherein said panel portion is an FRP solid plate formed integrally with said first FRP layer and said second FRP layer, wherein said panel portion is a panel element which has a space between said first FRP layer and said second FRP layer, wherein a core material is disposed in said space, wherein a plurality of panel portions are provided, and a space is formed between adjacent panel portions (please see above rejection).

Matsushima et al fails to disclose said difference in strength is provided by introducing a discontinuous part of a reinforcing fiber substrate, which is a trigger point for breakage, on at least one reinforcing fiber substrate layer of the lower strength FRP layer, wherein a difference in planar rigidity against external force is provided between said first and second FRP layers by providing a difference in hardness between a surface and a back surface of said core material..

Fugimoto teaches said difference in strength is provided by introducing a discontinuous part of a reinforcing fiber substrate, which is a trigger point for breakage, into at least one reinforcing fiber substrate layer of any one of said first and second FRP layers, wherein a difference in planar rigidity against external force is provided between said first and second FRP layers by providing a difference in hardness between a surface and a back surface of said core material (for it has the discontinuous part which changes the hardness of the panel).

As for the on at least one reinforcing fiber substrate layer of the lower strength FRP layer, it would have been obvious to one with ordinary skill in the art at the time the invention was made to switch and relocate the layers in order to obtain the best results and requires little to no routine skill in the art, and therefore would be obvious over the cited art. It has been held that rearranging parts in an invention requires only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Art Unit: 3612

Re Claim 31, Matsushima et al fails to disclose the wherein the difference wherein said difference in strength is provided by providing a difference in thickness between said first and second FRP layers, but it would have been obvious to one with ordinary skill in the art at the time the invention was made that the layer could have been different thicknesses since JP 2002-264846 A disclose that the layers may be made of more than one layer, furthermore it is known in the art to change the strength of by making it thicker or thinner.

Response to Arguments

Applicant's arguments with respect to claims 1, 4, 15-17, 19-24 and 31-32 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 3612

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELISSA A. BLACK whose telephone number is (571)272-4737. The examiner can normally be reached on M-F 7:00-3:30 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on (571) 272-6659. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. A. B./
Examiner, Art Unit 3612

/D GLENN DAYOAN/
Supervisory Patent Examiner, Art Unit 3612